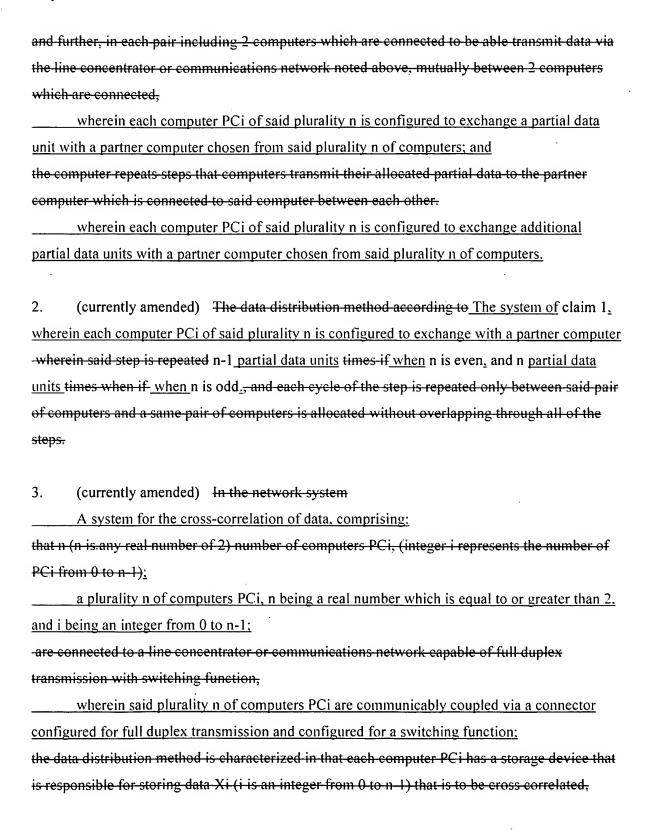
In The Claims

Kindly enter the claim amendments, without prejudice, as set forth below. A complete listing of the claims is provided, with a parenthetical indication of the status of each claim, and markings to show current changes.

1. (currently amended)
————In the network system
A system for the cross-correlation of data, comprising:
that n (n is any real number of 2) number of computers PCi, (integer i represents the
number of PCi from 0 to n-1)
a plurality n of computers PCi, n being a real number which is equal to or greater than 2,
and i being an integer from 0 to n-1;
are connected to a line concentrator or communications network that has a switching function,
wherein said plurality n of computers PCi are communicably coupled via a connector
with a switch;
the data distribution method is characterized in that each computer PCi has a storage device that
is responsible for storing data Xi (i is an integer from 0 to n-1) that is to be cross correlated,
each of said plurality n of computers PCi further including a storage device configured
for storing data Xi;
the data Xi noted above on each PCi can be divided into n partial data Xi(j) (j is an integer from
0 to n-1),
data Xi being divisible into n partial data units Xi(j), j being an integer from 0 to n-1;
data Xi being divisible into n partial data units Xi(k), k being an integer from 0 to n-1;
computer PCk (k is an integer from 0 to n-1) is responsible for the cross correlation processing
of partial data Xi(k) located on each computer PCi
a computer PCk, wherein computer PCk is configured for cross-correlation processing of
partial data Xi(k);



each of said plurality n of computers PCi further including a storage device configured
for storing data Xi;
the data Xi noted above on each PCi can be divided into n partial data Xi(j) (j is an integer from
0 to n-1),
data Xi being divisible into n partial data units Xi(j), j being an integer from 0 to n-1;
data Xi being divisible into n partial data units Xi(k), k being an integer from 0 to n-1;
computer PCk (k is an integer from 0 to n-1) is responsible for the cross correlation processing
of partial data Xi(k) located on each computer PCi ,and
a computer PCk, wherein computer PCk is configured for cross-correlation processing of
partial data Xi(k);
further , in computers which are connected to be able transmit data via the line concentrator or
communications network noted above, in repeating the step that computers transmit their
allocated partial data between the computer which sends data and the computer which receives
data, during each step, same computer for sending and same computer for receiving are allocated
without overlapping and same computers are allocated without overlapping through all of the
steps, and these steps are repeated n-1 times, regardless of whether n being even or odd.
wherein each computer PCi of said plurality n is configured to exchange n-1 partial data
units with a partner computer; and
wherein each computer PCi of said plurality is configured to exchange partial data units
with each partner computer once.
4. (currently amended) In the network system
A system for the cross-correlation of data, comprising:
that n (n is any real number of 2) number of computers PCi, (integer i represents the number of
PCi from 0 to n-1)
a plurality n of computers PCi, n being a real number which is equal to or greater than 2,
and i being an integer from 0 to n-1;
are connected to a line concentrator or communications network that has a switching function,
wherein said plurality n of computers PCi are communicably coupled via a connector

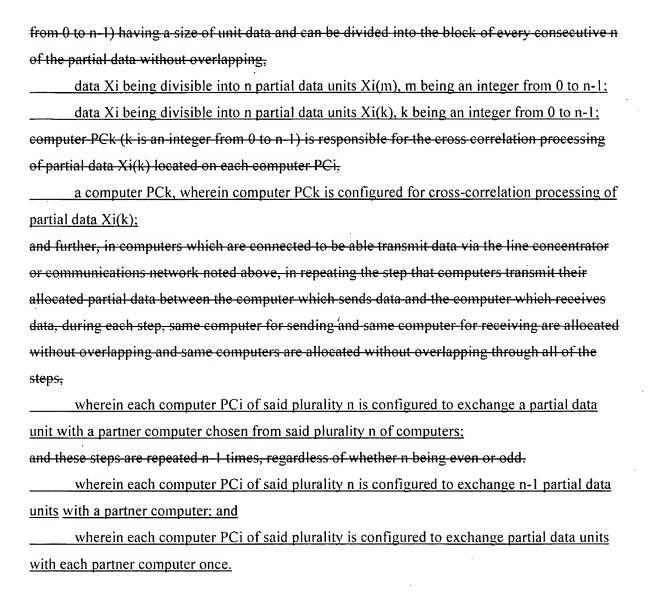
with a switch;

the data distribution method is characterized in that each computer PCi has a storage device that
is responsible for storing data Xi (i is an integer from 0 to n-1) that is to be cross correlated,
each of said plurality n of computers PCi further including a storage device configured
for storing data Xi;
the data Xi noted above on each PCi can be divided into n partial data Xi(m) (m is an integer
from 0 to n-1) having a size of unit data and can be divided into the block of every consecutive r
of the partial data without overlapping,
data Xi being divisible into n partial data units Xi(m), m being an integer from 0 to n-1;
data Xi being divisible into n partial data units Xi(k), k being an integer from 0 to n-1;
computer PCk (k is an integer from 0 to n-1) is responsible for the cross correlation processing
of partial data Xi(k) located on each computer PCi,
a computer PCk, wherein computer PCk is configured for cross-correlation processing of
partial data Xi(k):
and further, in each pair including 2 computers which are connected to be able transmit data via
the line concentrator or communications network noted above, mutually between 2 computers
which are connected,
wherein each computer PCi of said plurality n is configured to exchange a partial data
unit with a partner computer chosen from said plurality n of computers; and
the computer repeats steps that computers transmit their allocated partial data to the partner
computer which is connected to said computer between each other.
wherein each computer PCi of said plurality n is configured to exchange additional
partial data units with a partner computer chosen from said plurality n of computers.

5. (currently amended) The data distribution method according to system of claim 4. comprising wherein the block of the an α turn. (where α is being an integer of 0 and more), wherein the α turn includes partial data units, numbering from n x α to (n x α +n-1), and comprising partial data unit Xi(k+ n x α), the partial data unit Xi(k+ n x α) being located on each computer PCi, wherein and the computer PCk of the k turn is responsible is configured for the

cross correlation processing of partial data unit Xi(k+ n x α) located on each computer PCi.

6. (currently amended) The data distribution method according to A system according to
claim <u>s</u> 4 or 5,
wherein said steps are applied to every block n-1 times if n is an even number, and n times if n is
an odd number and each cycle of the step are repeated between the said pairs of computers
assigned without overlapping, and all of the steps are repeated between said pairs assigned
without overlapping.
wherein each computer PCi of said plurality n is configured to exchange n-1 partial data
units with a partner computer when n is an even number, and n partial data units with a partner
computer when n is an odd number; and
wherein each computer PCi of said plurality is configured to exchange partial data units
with each partner computer once.
7. (currently amended) In the network system
A system for the cross-correlation of data, comprising:
that n (n is any real number of 2) number of computers PCi, (integer i represents the number of
PCi from 0 to n-1)
a plurality n of computers PCi, n being a real number which is equal to or greater than 2,
and i being an integer from 0 to n-1;
are connected to a line concentrator or communications network capable of full duplex
transmission with switching function.
wherein said plurality n of computers PCi are communicably coupled via a connector
with a switch;
the data distribution method is characterized in that each computer PCi has a storage device that
s responsible for storing data Xi (i is an integer from 0 to n-1) that is to be cross correlated,
each of said plurality n of computers PCi further including a storage device configured
for storing data Xi:
he data Xi noted above on each PCi can be divided into a partial data Xi(m) (m is an integer



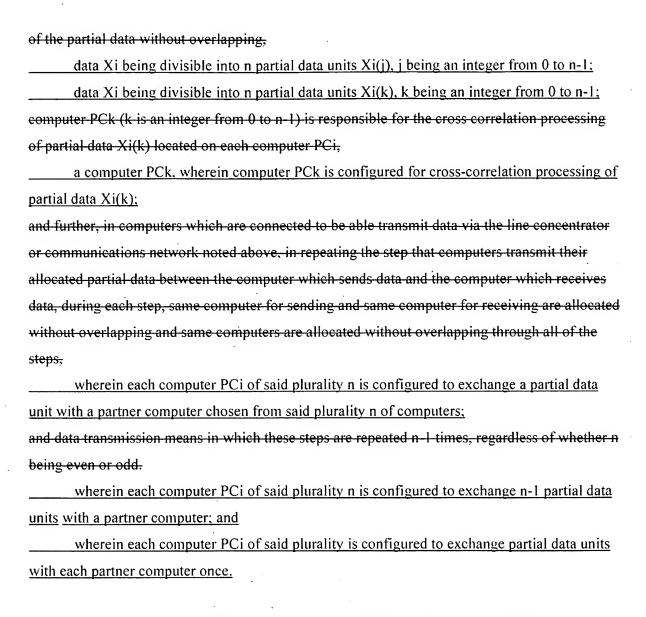
- 8. (currently amended) The data distribution method A system as in any one of the preceding claims, according to one of claims 1 to 7, in which the that computers PCi of said plurality n used in this method are general purpose computers.
- 9. (currently amended) The data distribution method according to one of claims 1 to 8 A system as in any one of the preceding claims, comprising a that the network medium allows configured for full duplex communications.

- 10. (currently amended) The data distribution method according to one of claims 1 to 9 A system as in any one of the preceding claims, in which that said data data used in this method are time series data recorded from radio telescopes.
- 11. (currently amended) In the network system A system for the cross-correlation of data, comprising: that n (n is any real number of 2) number of computers PCi, (integer i represents the number of PCi from 0 to n-1) a plurality n of computers PCi, n being a real number which is equal to greater than 2, and i being an integer from 0 to n-1; are connected to a line concentrator or communications network that has a switching function, wherein said plurality n of computers PCi are communicably coupled via a connector with a switch; the data distribution method is characterized in that each computer PCi has a storage device that is responsible for storing data Xi (i is an integer from 0 to n-1) that is to be cross correlated, each of said plurality n of computers PCi further including a storage device configured for storing data Xi: the data Xi noted above on each PCi can be divided into n partial data Xi(j) (j is an integer from 0 + to - n - 1)data Xi being divisible into n partial data units Xi(j), j being an integer from 0 to n-1; data Xi being divisible into n partial data units Xi(k), k being an integer from 0 to n-1; computer PCk (k is an integer from 0 to n-1) is responsible for the cross correlation processing of partial data Xi(k) located on each computer PCi and further, a computer PCk, wherein computer PCk is configured for cross-correlation processing of partial data Xi(k); and in each pair including 2 computers which are connected to be able to transmit data via the line concentrator or communications network noted above, mutually between 2 computers which are connected,

wherein each computer PCi of said plurality n is configured to exchange a partial data
unit with a partner computer chosen from said plurality n of computers.
includes data transmission means which repeats steps that computers transmit their allocated
partial data to the partner computer which is connected to said computer between each other.
12. (currently amended) In the network system
A system for the cross-correlation of data, comprising:
that n (n is any real number of 2) number of computers PCi, (integer i represents the number of
PCi from 0 to n-1)
a plurality n of computers PCi, n being a real number which is equal to or greater than 2,
and i being an integer from 0 to n-1;
are connected to a line concentrator or communications network that has a switching function,
wherein said plurality n of computers PCi are communicably coupled via a connector
with a switch:
the data distribution method is characterized in that each computer PCi has a storage device that
is responsible for storing data Xi (i is an integer from 0 to n-1) that is to be cross correlated,
each of said plurality n of computers PCi further including a storage device configured
for storing data Xi:
the data Xi noted above on each PCi can be divided into n partial data Xi(m) (m is an integer
from 0 to n-1) having a size of unit data and can be divided into the block of every consecutive r
of the partial data without overlapping,
data Xi being divisible into n partial data units Xi(m), m being an integer from 0 to n-1;
data Xi being divisible into n partial data units Xi(k), k being an integer from 0 to n-1;
computer PCk (k is an integer from 0 to n-1) is responsible for the cross correlation processing
of partial data Xi(k) located on each computer PCi, and further,
a computer PCk, wherein computer PCk is configured for cross-correlation processing of
partial data Xi(k); and
in each pair including 2 computers which are connected to be able transmit data via the line
concentrator or communications network noted above, mutually between 2 computers which are

connected,	
wherein each computer PCi of said plurality n is configured to exchange a partial data	
unit with a partner computer chosen from said plurality n of computers.	
includes data transmission-means which repeats steps that computers transmit their allocated	
partial data to the partner computer which is connected to said computer between each other.	
13. (currently amended) In the network system	
A system for the cross-correlation of data, comprising:	
that n (n is any real number of 2) number of computers PCi, (integer i represents the number of) f
PCi from 0 to n-1)	
a plurality n of computers PCi, n being a real number which is equal to or greater than	2,
and i being an integer from 0 to n-1;	
are connected to a line concentrator or communications network capable of full duplex	
transmission-with-switching-function,	
wherein said plurality n of computers PCi are communicably coupled via a connector	
with a switch:	
the data distribution method is characterized in that each computer PCi has a storage device the	1at
is responsible for storing data Xi (i is an integer from 0 to n-1) that is to be cross correlated,	
each of said plurality n of computers PCi further including a storage device configured	<u>l</u>
for storing data Xi;	
the data Xi noted above on each PCi can be divided into n partial data Xi(j) (j is an integer from	m
0 to n 1),	
data Xi being divisible into n partial data units Xi(j), j being an integer from 0 to n-1;	
data Xi being divisible into n partial data units Xi(k), k being an integer from 0 to n-1;	
computer PCk (k is an integer from 0 to n 1) is responsible for the cross correlation processing	<u>a</u>
of partial data Xi(k) located on each computer PCi,	
a computer PCk. wherein computer PCk is configured for cross-correlation processing	of
partial data Xi(k):	
and further . in computers which are connected to be able transmit data via the line concentrat	or.

or communications network noted above, wherein each computer PCi of said plurality n is configured to exchange a partial data unit with a partner computer chosen from said plurality n of computers; and in repeating the step that computers transmit their allocated partial data-between the computer which sends data and the computer which receives data, during each step, same computer for sending and same computer for receiving are allocated without overlapping and same computers are allocated without overlapping through all of the steps, and includes data transmission means in which these steps are repeated n-1 times, regardless of whether n being even or odd. wherein each computer PCi of said plurality n is configured to exchange n-1 partial data units with a partner computer; and wherein each computer PCi of said plurality is configured to exchange partial data units with each partner computer once. 14. (currently amended) In the network system A system for the cross-correlation of data, comprising: that n (n is any real number of 2) number of computers PCi, (integer i represents the number of PCi from 0 to n 1) a plurality n of computers PCi, n being a real number which is equal to or greater than 2, and i being an integer from 0 to n-1; are connected to a line concentrator or communications network capable of full duplex transmission with switching function, wherein said plurality n of computers PCi are communicably coupled via a connector with a switch; the data distribution method is characterized in that each computer PCi has a storage device that is responsible for storing data Xi (i is an integer from 0 to n-1) that is to be cross correlated, each of said plurality n of computers PCi further including a storage device configured for storing data Xi; the data Xi noted above on each PCi can be divided into n partial data Xi(m) (m is an integer from 0 to n-1) having a size of unit data and can be divided into the block of every consecutive n



15. (currently amended) The data distribution method according to one of claims 11 to 14

A system as in one of claims 11-14, comprising a that the network medium allows configured for full duplex communications.